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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HUNNINGS, TRAVIS R

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,870

Applicant(s)

HILL, BOBBY D.

Examiner

Travis R Hunnings

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau. (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Page 12, paragraphs 36 and 37, "blinking or oscillating circuit 546"

Page 12, paragraph 37, "personal alarm system 570"

Page 14, paragraph 43, "latch... solenoid 655"

Page 15, paragraph 45, "display screen 375", "lights 354" and "buttons 356"

Page 18, paragraph 52, "air conditioning conduit 940"

Page 20, paragraph 60 and page 21, paragraph 21, "submergible submarine 2000"

Page 20, paragraph 61, "check valve 60"

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

Figure 5, element 170 not described.

Figure 7, element 916 not described.

Figure 13, element 40' not described.

Art Unit: 2632

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: on page 7, paragraph 23, the term "conduit system 200" should read "conduit system 100"; on page 9, paragraph 29, the term "arrows 33" should read "arrows 3"; on page 10, paragraph 33, the term "battery bank 160" should read "battery bank 170" for all instances except for when referring to the "inverter 160".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2632

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 4, 6, 7, 23, and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jung (US Patent 6,356,425).

Regarding claim 1, Jung discloses *Timer-Thermal-Overload Shutoff Apparatus* that has the following claimed subject matters:

The claimed power strip interface is met by the female receptacles or connectors (fig. 1 element 7);

The claimed communications system comprising at least one sensor connected to said power strip interface, wherein said sensor is designed to detect at least one element is met by the device comprising at least one of a voltage sensor; a digital voltage sensor (col4 30-39);

The claimed response system wherein said communication system selectively sends a signal to said response system is met by the display device (75) receiving a signal from the timer-thermal shutoff apparatus containing the sensor (col5 55-63).

Regarding claim 3, the claimed portion of said selective sending of said signal is accomplished over a communication bus and wherein at least a portion of said communication bus is compliant with network bus is met by the display device being in communication with the timer-thermal shutoff apparatus by any appropriate communications link including hard-wire communications links, radio communication,

Art Unit: 2632

wireless communications links, internet communications links, etc. (col5 55-63). The term "network bus" is interpreted to mean a communication bus that connects multiple devices together, which would be clearly met by any of the above mentioned communication links.

Regarding claim 4, the claim is interpreted and rejected as claim 3 stated above.

Regarding claim 6, the claimed portion of said selective sending is communicated by said at least one sensor is met by the high current protection device comprising any appropriate device that opens the current path if a high current event is encountered through the various sensors (col4 30-39) and the display thereby providing the user with an indication of the status of the timer-thermal shutoff apparatus (col5 44-54).

Regarding claim 7, the claim is interpreted and rejected as claim 4 stated above.

Regarding claim 23, the claimed response system comprising a warning device is met by the display providing the user with an indication of the status of the timer-thermal shutoff apparatus (col5 44-54).

²⁸
Regarding claim 24, the claim is interpreted and rejected as claim 23 stated above.

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Fuss et al. (Fuss; US Patent 6,769,250).

Regarding claim 2, Jung discloses all the claimed limitations except for the claimed portion of the communication bus being AS-I compliant. Fuss discloses *Fluidic System with a Safety Function* that teaches a communications bus that utilizes an AS-I bus (col6 9-15). The AS-I interface is known to be used for communication buses that involve sensors and would therefore be a good choice for use in the safety system of Jung. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung according to the teachings of Fuss to use an AS-I interface in the communication bus.

Regarding claim 5, Jung and Fuss disclose all the claimed limitations. The claimed portion of said selective sending is communicated by said at least one sensor is met by the high current protection device comprising any appropriate device that opens the current path if a high current event is encountered through the various sensors (col4

Art Unit: 2632

30-39) and the display thereby providing the user with an indication of the status of the timer-thermal shutoff apparatus (col5 44-54).

9. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Fuss and further in view of Cash (US Patent 5,729,197).

Regarding claim 8, Jung and Fuss disclose all the claimed limitations except for the claimed system further comprising a control module wherein said sensors communicate with said control module and at least a portion of said selective sending is controlled by said control module. Cash discloses *Automatic, Self-Triggering Alarm Processing System and Method* that teaches an alarm system that monitors at least one sensor that includes a central processing unit that selects a predefined alarm message based on the sensor value received and sends that alarm message to a response means (col2 23-39). Using a processor to handle the sensor inputs and alarm outputs would increase the flexibility of the system and make it cheaper to produce by having one central controller. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung and Fuss according to the teachings of Cash to include a central control module.

Regarding claim 11, Jung, Fuss and Cash disclose all the claimed limitations. The claimed control module comprising a distributed control system is met by the central processing unit being coupled to at least two telecommunications medium and

Art Unit: 2632

further comprising means for designating a selected telecommunications medium (Cash, col2 23-39). The term "distributed control system" is interpreted to mean a system that controls multiple other devices.

10. Claims 9, 10, 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Cash.

Regarding claim 9, Jung discloses all the claimed limitations except for the claimed system further comprising a control module wherein said sensors communicate with said control module and at least a portion of said selective sending is controlled by said control module. Cash discloses *Automatic, Self-Triggering Alarm Processing System and Method* that teaches an alarm system that monitors at least one sensor that includes a central processing unit that selects a predefined alarm message based on the sensor value received and sends that alarm message to a response means (col2 23-39). Using a processor to handle the sensor inputs and alarm outputs would increase the flexibility of the system and make it cheaper to produce by having one central controller. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung according to the teachings of Cash to include a central control module.

Regarding claim 10, the claim is interpreted and rejected as claim 9 stated above.

Regarding claim 12, Jung and Cash disclose all the claimed limitations. The claimed control module comprising a distributed control system is met by the central processing unit being coupled to at least two telecommunications medium and further comprising means for designating a selected telecommunications medium (Cash, col2 23-39). The term "distributed control system" is interpreted to mean a system that controls multiple other devices.

Regarding claim 13, the claim is interpreted and rejected as claim 12 stated above.

11. Claims 14, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Fuss and further in view of Cash and further in view of Quigley (US Patent 6,583,720).

Regarding claim 14, Jung, Fuss and Cash disclose all the claimed limitations except for the claimed control module comprising a programmable logic controller. Quigley discloses *Command Console for Home Monitoring System* that teaches a central processing unit for controlling alarm conditions that can take the form of a programmable logic controller (col5 62-67 and col6 1-2). A programmable logic controller would enable easy programming of the device and would decrease the cost of manufacture. Therefore it would have been obvious to one of ordinary skill in the art at

Art Unit: 2632

the time of the invention to modify the device disclosed by Jung, Fuss and Cash according to the teachings of Quigley to include a programmable logic controller as the control module.

Regarding claim 17, Jung, Fuss and Cash disclose all the claimed limitations except for the claimed control module comprising a microprocessor. Quigley teaches a central processing unit for controlling alarm conditions that can take the form of an embedded microprocessor (col5 62-67). An embedded microprocessor would increase the flexibility and provide more functionality for the device. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung, Fuss and Cash according to the teachings of Quigley to include a microprocessor as the control module.

Regarding claim 20, Jung, Fuss and Cash disclose all the claimed limitations except for the claimed control module comprising a computer. Quigley teaches a central processing unit for controlling alarm conditions that can take the form of an external computer (col5 62-67 and col6 1-2). An external computer would allow the device to be easily adapted to preexisting environments that already have computers in them. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung, Fuss and Cash to include a computer as the control module.

Art Unit: 2632

12. Claims 15, 16, 18, 19, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Cash and further in view of Quigley.

Regarding claim 15, Jung and Cash disclose all the claimed limitations except for the claimed control module comprising a programmable logic controller. Quigley discloses *Command Console for Home Monitoring System* that teaches a central processing unit for controlling alarm conditions that can take the form of a programmable logic controller (col5 62-67 and col6 1-2). A programmable logic controller would enable easy programming of the device and would decrease the cost of manufacture. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung and Cash according to the teachings of Quigley to include a programmable logic controller as the control module.

Regarding claim 16, the claim is interpreted and rejected as claim 15 stated above.

Regarding claim 18, Jung and Cash disclose all the claimed limitations except for the claimed control module comprising a microprocessor. Quigley teaches a central processing unit for controlling alarm conditions that can take the form of an embedded microprocessor (col5 62-67). An embedded microprocessor would increase the flexibility and provide more functionality for the device. Therefore it would have been

Art Unit: 2632

obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung and Cash according to the teachings of Quigley to include a microprocessor as the control module.

Regarding claim 19, the claim is interpreted and rejected as claim 18 stated above.

Regarding claim 21, Jung and Cash disclose all the claimed limitations except for the claimed control module comprising a computer. Quigley teaches a central processing unit for controlling alarm conditions that can take the form of an external computer (col5 62-67 and col6 1-2). An external computer would allow the device to be easily adapted to preexisting environments that already have computers in them. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung and Cash to include a computer as the control module.

Regarding claim 22, the claim is interpreted and rejected as claim 21 stated above.

13. Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Thiessen et al. (Thiessen; US Patent 6,552,647).

Regarding claim 24, Jung discloses all the claimed limitations except for the claimed response system further comprising a sprinkler. Thiessen discloses *Building Environment Monitor and Control System* that teaches an alarm system that responds to the input of one or more sensors (col2 8-24) and also including a sprinkler system as one of the response systems for the system (col4 62-67 and col5 1-3). The sprinkler system would be beneficial to stop the spread of fire in the event of a fire emergency occurring. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung according to the teachings of Thiessen to include a sprinkler as part of the response system.

Regarding claim 26, Jung discloses all the claimed limitations except for the claimed warning device comprising an audible alarm. Thiessen teaches an alarm condition that triggers a siren and other audible alarms (col5 46-51). The audible alarm would help to better alert users to the occurrence of an emergency condition. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung according to the teachings of Thiessen to include an audible alarm as part of the warning device.

14. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of McCutchen (US Patent 4,944,216).

Regarding claim 25, Jung discloses all the claimed limitations except for the claimed response system further comprising a vacuum system. McCutchen discloses *Building Emergency Exhaust Fan System* that teaches using an exhaust fan system (col2 24-63). The exhaust fan system is set up to create enough airflow to vacate areas of smoke and replace it with fresh outside air and would therefore be beneficial in the event of a fire emergency to cut down on the amount of smoke in the building. The airflow is clearly set up to vacate the air as is the same effect of a vacuum system. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung according to the teachings of McCutchen to include an exhaust fan system.

15. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung in view of Sulkoski et al. (Sulkoski; US Patent 4,380,759).

Regarding claim 27, Jung discloses all the claimed limitations except for the claimed warning device comprising a vibrating alarm system. Sulkoski discloses *Apparatus to Alert a Deaf Person* that teaches an alarm device that has a vibrating warning device. The vibrating function of the device would be ideal for use with sleeping or deaf persons. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Jung according to the teachings of Sulkoski to include a vibrating alarm system.

Art Unit: 2632

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilkinson, *Computer Security Device*, US Patent 4,985,695

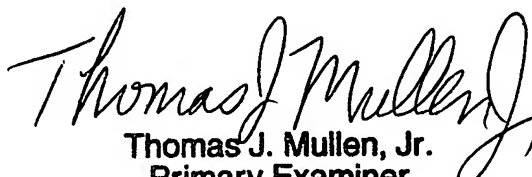
Kim, *Automatic Sprinkler of Fire Detector Type...* US Patent 6,615,927

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Travis R Hunnings



Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632

11-14-04